

CLAIMS:

1. Transmission system comprising a transmitter with a signal encoder having an input for a signal to be encoded, said signal encoder comprises a codebook entry selector for selecting a codebook entry for obtaining a synthetic signal giving a best approximation of a signal representative of the input signal, the codebook entry comprises a plurality of samples

5 that can assume more than two values, said codebook entry being identified with a sequence of symbols, the transmitter being arranged for transmitting the sequence of symbols to a receiver, the receiver comprises a decoder with a codebook for deriving the codebook entry from the received sequence of symbols characterized in that the codebook entries corresponding to sequences of symbols differing in one particular symbol value, differ in one single sample
10 value.

2. Transmission system according to claim 1, characterized in that the difference between said sample values of codebook entries corresponding to sequences of symbols differing in one particular symbol value, is equal to a smallest quantization step of said sample
15 value.

3. Transmission system according to claim 1 or 2, characterized in that the number of possible sample values is odd.

20 4. Transmission system according to claim 3, characterized in that a numerical value associated with a first codebook entry is equal to the numerical value of the sequence of symbols of a second codebook entry, and in that the numerical value associated with the second codebook entry is equal to the numerical value of the sequence of symbols associated with the first codebook entry.
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5. Transmitter with a signal encoder having an input for a signal to be encoded, said signal encoder comprises a codebook entry selector for selecting a codebook entry for obtaining a synthetic signal giving a best approximation of a signal representative of the input signal, the codebook entry comprises a plurality of samples that can assume more than two

values, said codebook entry being identified with a sequence of symbols, the transmitter being arranged for transmitting the sequence of symbols characterized in that the codebook entries corresponding to sequences of symbols differing in one particular symbol value, differ in one single sample value.

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6. Receiver for receiving an encoded signal comprising a sequence of symbols representative of a codebook entry comprising a plurality of samples that can assume more than two values, the receiver comprises a decoder with a codebook for deriving the codebook entry from the received sequence of symbols characterized in that the codebook entries corresponding to sequences of symbols differing in one particular symbol value, differ in one single sample value.

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7. Signal encoder having an input for a signal to be encoded, said signal encoder comprises a codebook entry selector for selecting a codebook entry for obtaining a synthetic signal giving a best approximation of a signal representative of the input signal, the codebook entry comprises a plurality of samples that can assume more than two values, said codebook entry being identified with a sequence of symbols, characterized in that the codebook entries corresponding to sequences of symbols differing in one particular symbol value, differ in one single sample value.

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8. Decoder for decoding an encoded signal comprising a sequence of symbols representative of a codebook entry comprising a plurality of samples that can assume more than two values, the receiver comprises a decoder with a codebook for deriving the codebook entry from the received sequence of symbols characterized in that the codebook entries corresponding to sequences of symbols differing in one particular symbol value, differ in one single sample value.

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9. Transmission method comprising selecting a codebook entry for obtaining a synthetic signal giving a best approximation of a signal representative of the input signal, the codebook entry comprises a plurality of samples that can assume more than two values, said codebook entry being identified with a sequence of symbols, the method further comprises transmitting the sequence of symbols over a transmission medium, the method further comprises receiving the sequence of symbols from the transmission medium and deriving the codebook entry from the received sequence of symbols characterized in that the codebook

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entries corresponding to sequences of symbols differing in one particular symbol value, differ in one single sample value.

10. Encoding method comprising selecting a codebook entry for obtaining a synthetic signal giving a best approximation of a signal representative of the input signal, the codebook entry comprises a plurality of samples that can assume more than two values, said codebook entry being identified with a sequence of symbols, characterized in that the codebook entries corresponding to sequences of symbols differing in one particular symbol value, differ in one single sample value.

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11. Decoding method for decoding an encoded signal comprising a sequence of symbols representative of a codebook entry comprising a plurality of samples that can assume more than two values, the decoding method comprises deriving the codebook entry from the received sequence of symbols characterized in that the codebook entries corresponding to sequences of symbols differing in one particular symbol value, differ in one single sample value.

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